

Civil Design Engineer

About Us

Alion Energy is a new kind of renewable energy company with technology and products that will allow us to make a significant and cost effective contribution to solving the world's energy issues. Our innovative engineering and technology teams coupled with our cost-effective approach to designing and building utility scale power plants, allow us to provide clean, inexpensive, renewable energy solutions that set us apart from the rest of the field. We are passionate about using renewable energy to make a real difference in our world.

Job Description

The Civil Design Engineer will be independently responsible for designing all civil aspects of Alion's single axis tracker system, including coordinating wind tunnel studies, regional loads (wind, seismic, snow), structural design, and foundation design (concrete). In addition, the engineer will be responsible for identifying cost out opportunities and coordinating civil engineering aspects of prototype and pilot projects.

The role will report to the Director of R&D. The ideal candidate is technical, innovative, & integrative – a civil engineer that has a passion for design & building, enjoys teamwork, and has a good mix of theory and hands-on experience.

Job Duties:

- Coordinate wind tunnel studies with external consultants (Alion uses CPP)
- Investigate & convert select international building codes into system loads (wind, snow, seismic)
- Perform structural analysis of the system design and create structural design calculations and reports
- Interpret geotechnical report recommendations and site grading and drainage drawings
- Perform foundation design, including analysis of concrete performance and subbase support requirements
- Model costs and identify cost out opportunities
- Coordinate civil engineering activities associated with prototype and pilot projects
- Review concrete mix designs and field soil compaction and concrete test data



Skills/Education/Experience:

- Civil Engineering degree
- 5-10 years of experience
- Bridge or building and pavement design experience
- Fluent with ASCE 7-10, ACI 318, AISI S-100 design codes and interpreting geotechnical reports and grading drawings
- Proficient with AutoCAD
- Familiarity with RISA 3D, RSG-CFS a plus
- Experience with concrete slip forming, SolidWorks, & programming are all a plus
- 10% travel may be expected, including international

Work Environmental & Physical Demands:

The characteristics described below are representative of those encountered while performing the essential functions of this position. Reasonable accommodations will be made to enable individuals with disabilities to perform the essential functions.

- While performing duties of this job, would occasionally be required to stand, walk, sit, reach with hands and arms, climb or balance, stoop or kneel, talk and hear, and use fingers and hands to feel objects, tools or controls.
- Must occasionally lift and/or move up to 25 pounds.
- Specific vision abilities required include close vision, distance vision, depth perceptions, and the ability to adjust focus.
- Overtime may be necessary as workload's dictate. This may include weekdays, weekends and/or holidays.
- Job will generally be performed in an office environment, but may require travel to visit a project site or client's office, Conditions will vary at each location, but the conditions listed above will generally apply.

We provide a comprehensive benefits package including: PTO, Paid Holidays, Medical, Dental, Vision, 401(k) and Competitive Salary. At Alion, we operate in a casual teamwork environment. If your experience and skills meet or exceed our requirements, please e-mail your resume in PDF or Word format to: engineeringjobs@alionenergy.com. Please include job code in the subject line: CE144

Equal Opportunity Employer